

Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11) **EP 1 041 012 A1**

(12)

## EUROPEAN PATENT APPLICATION

(43) Date of publication:  
04.10.2000 Bulletin 2000/40

(51) Int Cl.7: **B65D 85/60, B65D 25/54,  
A23G 3/00**

(21) Application number: **99830193.1**

(22) Date of filing: **02.04.1999**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE**  
Designated Extension States:  
**AL LT LV MK RO SI**

(72) Inventor: **Arnaldi, Renato**  
**Luxembourg (LU)**

(74) Representative: **Rambelli, Paolo et al**  
**c/o JACOBACCI & PERANI S.p.A.**  
**Corso Regio Parco, 27**  
**10152 Torino (IT)**

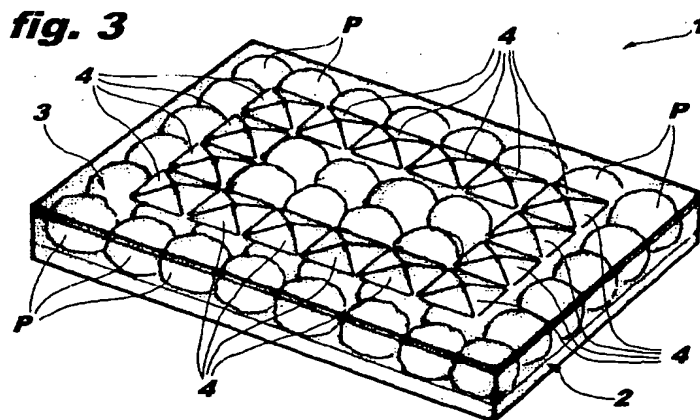
(71) Applicants:

- **SOREMARTEC S.A.**  
**6700 Arlon-Schoppach (BE)**  
Designated Contracting States:  
**BE CH DK ES FI FR GB GR IE LI LU MC NL PT SE**  
**AT**
- **Ferrero S.p.A.**  
**12051 Alba (Cuneo) (IT)**  
Designated Contracting States:  
**IT**
- **FERRERO OFFENE HANDELSGESELLSCHAFT**  
**m.b.H.**  
**D-60599 Frankfurt (DE)**  
Designated Contracting States:  
**DE**

(54) **Package provided with magnifying means particularly for food products**

(57) Packaging (1) is preferably constituted by a box which includes a base part (2) and a lid (3), preferably of transparent plastics material. Adjacent at least some of the sites provided to house the products (P), constituted usually by confectionery such as pralines, choco-

lates and the like, lens formations (4) are arranged which draw attention to the corresponding products (P), both by creating light-reflecting effects similar to those seen in a jewel, and by making it easier to see the products, even when the packaging (1) is viewed from a very narrow angle.



EP 1 041 012 A1

## Description

[0001] This invention relates to packaging according to the preamble of Claim 1.

[0002] Packaging of this type is currently used, for example, for packing food products such as confectionery: pralines chocolates and the like. On this subject, see, for example, some of the packagings forming the subject of the International Models DM/033113 or DM/040299.

[0003] The aforesaid packagings are usually intended to contain one or several rows, possibly one layer above the other, of similar or different products.

[0004] Should the package house different products, it could prove advantageous to ensure that some products - perhaps because they are considered especially select or attractive - can be made to stand out from the others. This can be achieved, for example, by using wrappings for these products of a colour which contrasts with that of the other products.

[0005] This arrangement is not always possible to put into practice however. There are situations, for example, where the products one would like to stand out have traditional wrappers which it would be a mistake to alter only to draw attention to them in a mixed pack. The same argument may apply in a complementary manner to the wrappers of other products intended for such packaging.

[0006] In any case, the above arrangement does not solve the problem of how to make particular products to stand out when the package, generally a box, is not viewed in plan (that is from a perspective that is perpendicular or substantially perpendicular to the plane of the row or rows of products) but from the side, with a fairly restricted angle of observation: typically, this situation occurs when the package is arranged on a shelf of a shop window or on a counter and is viewed horizontally or almost horizontally. It will be appreciated that this type of problem also arises in packs which contain products which are all the same.

[0007] The object of the present invention is thus to provide packaging of the type described above which is able to meet the requirements specified above, while avoiding the disadvantages described.

[0008] This object is achieved, according to the invention, by providing packaging having the characteristics claimed in the appended Claims.

[0009] In addition to providing an entirely satisfactory response to the requirements set out above, the packaging of the invention has the additional advantage that the characteristic lens formations of the packaging give a jewel-like effect, with reflected light creating an attractive sparkling effect which catches the attention of anyone looking at the packaging and the products contained therein.

[0010] The invention will now be described, purely by way of non-limitative example, with reference to the appended drawings, in which:

Figure 1 is a perspective view of a package according to the invention,

Figure 2 is a section taken on the line II-II of Figure 1, and

Figure 3 illustrates a possible variant of the arrangement of the invention.

[0011] In the drawings, the reference number 1 generally indicates a package which can be used, for example, to pack food products such as confectionery, that is pralines, chocolates and the like.

[0012] For example (without, of course, intending to limit the scope of the invention), the products P could be constituted, for example, by confectionery such as that sold under the brand names Ferrero Rocher, Confectioneria Raffaello, Mon Chéri or Pocket Coffee by companies of the Ferrero group.

[0013] In the embodiments illustrated here, the package 1 is substantially in the shape of a more or less flattened box, comprising a bottom tray-shape part 2 with an associated removable lid 3 which closes the opening thereof.

[0014] In the examples illustrated, both the bottom 2 and the lid 3 are made entirely of a transparent material and the lens formations 4, which will be described in greater detail later, are present only on the lid 3.

[0015] It must be emphasised that these choices are purely by way of example as, for instance, the bottom tray 2 could be made, at least in part, of a non-transparent material, while the lens formations 4 could be only on the bottom tray 2 (around the sides thereof, for example) instead of only on the lid 3, or could be both on the bottom 2 and on the lid 3.

[0016] As will be understood more clearly from the description which follows, the use of a transparent material is important only in order to achieve the characteristic optical effect of the lens formations 4. The preferred choice, at least for the transparent components, is a plastics material such as clear polystyrene, for example. Other options are of course possible, especially for the non-transparent portions (typically cardboard or card).

[0017] In the same way, the fact that the embodiments illustrated here refer to prismatic box-shaped packages which receive flat rows of products P inside them, should not be seen in any way as limiting the scope of the invention.

[0018] The arrangement of the invention is suited, in fact, to be applied to packaging of any shape (in addition, for example, to the rectangular box illustrated here, it could be circular, elliptical, heart-shaped, lobed, ring-shaped or any other curved and/or linear shape) and also to packaging intended to hold superposed layers of rows of products. It is also clear that the typical effect achieved by the lens formations 4 applies primarily to the products arranged in a housing positions adjacent the said formations rather than to products which are concealed by other products - for instance as a result of several layers being one on top of the other.

[0019] The specific criteria involved in the manufacture of the package have little bearing on the achievement of the characteristic result of the invention (and are thus able to be modified within a broad range of possible alternative arrangements), in particular with regard to the housing and positioning of the products P within the packaging.

[0020] In this context, the appended drawings refer, purely by way of example, to an arrangement in which the bottom part 2 is constituted essentially by a sort of tray (see Figure 2), comprising a flat bottom wall 20 surrounded by peripheral walls 21, with a liner 22 inserted therein. The latter is usually made of plastics material (so-called acetate), shaped, usually by heat moulding, so as to form a plurality of cavities 23. Each cavity 23 forms, within the packaging 1, a housing for a product P. In the embodiment illustrated here, the products P are shown as approximately spherical pralines, wrapped in sheet material and resting in respective cups B of folded card.

[0021] A vital characteristic of the arrangement of the invention consists in the fact that a respective lens formation 4 is arranged over each housing position of a product P, defined by a cavity 23 (see the examples of Figures 1 and 2), or over only some positions thereof (see the arrangement of Figure 3).

[0022] In the embodiments illustrated here by way of example, the formations 4 are formed in the lid 3; however, as stated earlier, formations of this type could be arranged alternatively on the body 2 rather than on the lid 3, or both on the body 2 and on the lid 3.

[0023] In the embodiment illustrated, the lens formations 4 are defined by local variations in the thickness of the wall of the lid 3. In particular, each lens formation 4 is constituted by a respective portion of lid in the shape of a very squat, square-based pyramid. In other words, the lid is moulded in a raised, "diamond" pattern.

[0024] This embodiment has proved particularly advantageous in achieving the aim of drawing attention to a respective product P as described in the introduction to the present description. This is especially true (thanks to the number of faces making up each pyramid or diamond formation) of the so-called "jewel" effect observed when the packaging is viewed from a narrow angle of vision, as shown schematically by the arrow V of Figure 2.

[0025] It is clear, however, that the aforesaid lens formations could also be shaped entirely differently. For example, while retaining a general pyramid shape, the base could differ from the square illustrated, being a triangle, a pentagon, a hexagon etc. Similarly, instead of having a pyramid shape, the formations 4 could be a frustum of a pyramid or of a cone, a section or a segment of a sphere etc.

[0026] Although the embodiment illustrated here provides for the thickness of the lid 3 (or, in general, of the respective part of the package 1) to vary at the site of each formation 4, so as to form an (at least slight) out-

ward projection or protuberance on the packaging 1, this choice is in no way compulsory.

[0027] For example, the variation in the thickness of the wall could go in the opposite direction, thereby keeping the outside of the box smooth, with the aforesaid projections or protuberances facing inwardly of the packaging, or forming convex or concave surfaces both inwardly and outwardly of the packaging 1.

[0028] The variation in the thickness of the wall, which in the example illustrated aims essentially to provide formations with a convex projecting surface (outwardly or inwardly of the packaging), could also work in the exact opposite way, creating a concave rather than convex surface at the site of each lens formation.

[0029] It is not in fact essential to act on the thickness of the wall, since the desired effect can be achieved, at least in some cases, by simply shaping the wall, rather than actually varying the thickness thereof.

[0030] The expressions "lens formation" and/or "lens means" are thus used here in the broadest meaning of the terms, thereby indicating any body of at least partially transparent material (the material may in fact be pigmented) limited by two surfaces, the one flat and the other shaped or both shaped.

[0031] It will be appreciated that, as indicated earlier, the arrangement of the invention is suited either to drawing attention to all the products P in the packaging 1 or to just some of these.

[0032] Thus, in the embodiment illustrated in Figures 1 and 2, a lens formation 4 is provided for each position housing a product P. In this case, all the products P contained in the packaging adjacent the lid 3 benefit from the characteristic ability of the invention to draw attention.

[0033] In the embodiment of Figure 3 on the other hand, only a few of the positions provided for housing products P have associated lens formations 4 in the lid 3. In this case, the characteristic ability of the invention to draw attention is focused on the products P housed in the said positions, although not exclusively.

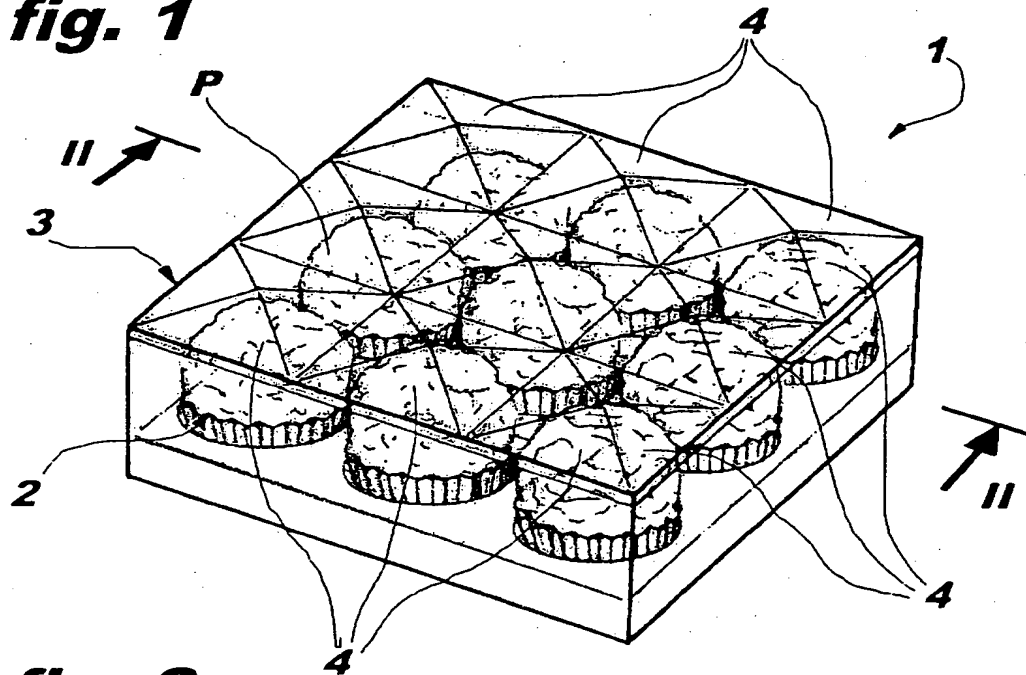
[0034] Naturally, the principle of the invention remaining the same, manufacturing details and embodiments may be widely varied from those described and illustrated, without departing thereby from the scope of the present invention.

#### Claims

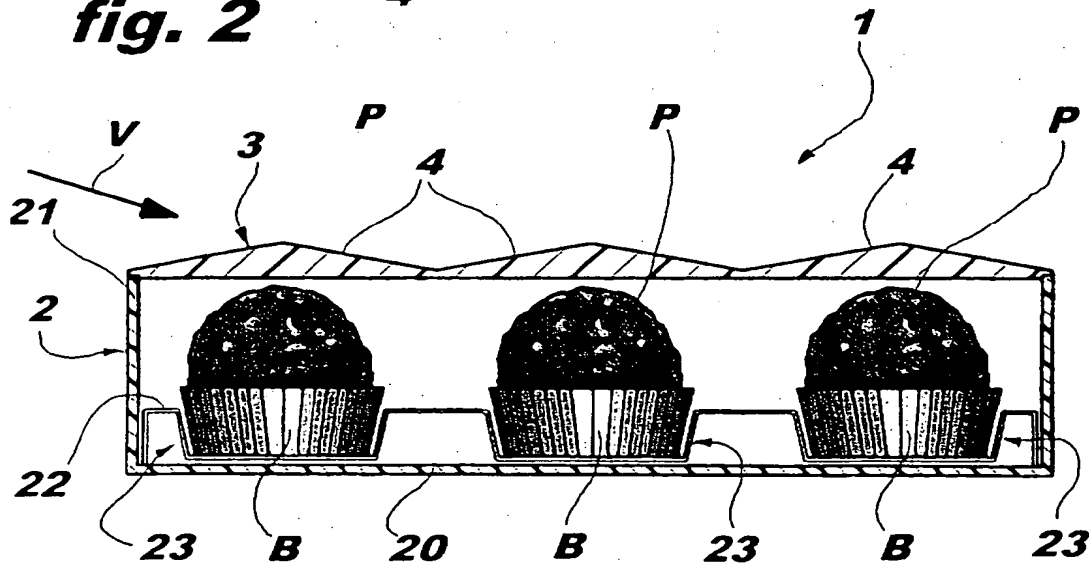
1. A package which includes a container body (2, 3) the walls of which define at least one site for housing a respective product (P), characterised in that the said walls (3) have a respective lens means (4) adjacent the said at least one housing site.
2. A package according to Claim 1, characterised in that the said lens means (4) is formed by a portion of wall of varying thickness.

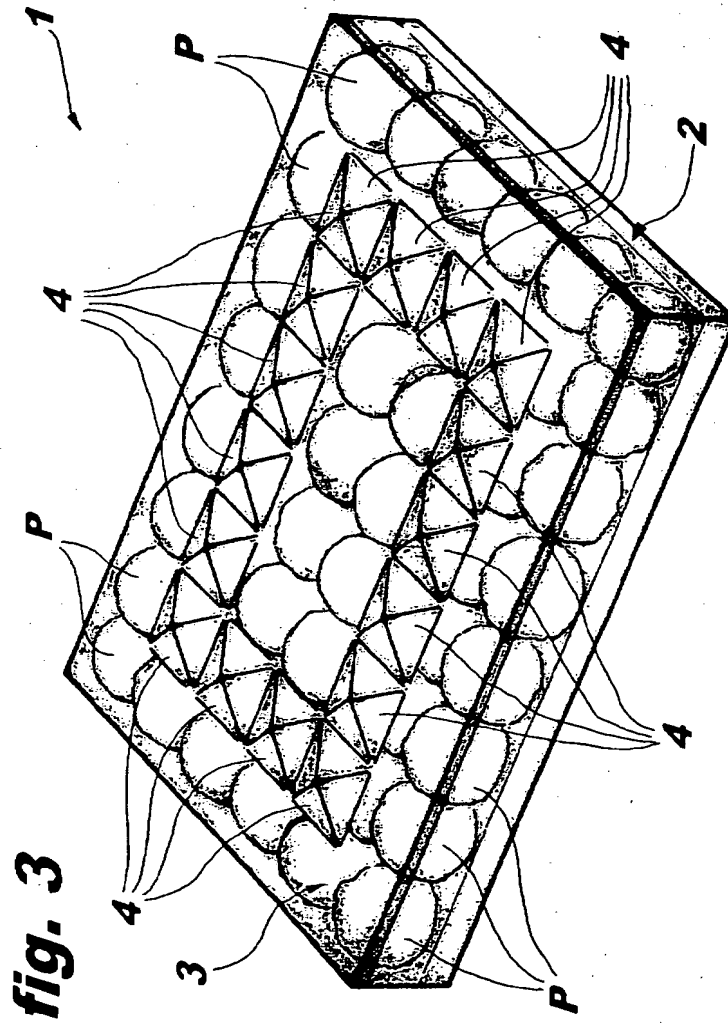
3. A package according to Claim 1 or Claim 2, characterised in that the said lens means (4) is defined by a wall element with a curvature projecting outwardly of the packaging. 5
4. A package according to any one of Claims, 1 to 3, characterised in that the said lens means (4) is defined by a wall element with a curvature projecting inwardly of the packaging. 10
5. A package according to any one of the preceding Claims, characterised in that the said lens means (4) is of pyramid shape. 15
6. A package according to Claim 5, characterised in that the said pyramid shape has a square base. 20
7. A package according to any one of the preceding Claims, characterised in that the said container body includes a base part (2) and a lid (3) arranged to cover the said base part (2) and in that the said lens means is formed in the lid. 25
8. A package according to any one of the preceding Claims, characterised in that the said container body includes a plurality of the said housing sites (23) and in that a respective lens means (4) is provided for each of the said housing sites (23). 30
9. A package according to any Claim from 1 to 8, characterised in that the said container body includes a plurality of the said housing sites (23) and in that a respective lens means (4) is provided for only some of the said housing sites (23). 35
10. A package according to Claim 7 and Claim 9, characterised in that it includes a plurality of lens means (4) arranged on the said lid (3) in positions corresponding to respective housing sites (23). 40
11. A package according to any one of the preceding Claims, characterised in that the said walls (2, 3) are constituted, at least adjacent the said respective lens means (4), of a transparent, or substantially transparent, plastics material. 45
12. A package according to any one of the preceding Claims, characterised in that the said container body (2, 3) is generally box-shape. 50
13. A package according to Claim 12, characterised in that the said container body (2, 3) has a generally flat shape and has a plurality of sites (23) for housing products arranged in flat rows. 55
14. A package according to Claim 12, characterised in that the said container body (2, 3) includes a plurality of sites for housing products arranged in rows
- one on top of the other and in that lens means (4) are provided for at least one housing area positioned adjacent the said walls.

**fig. 1**



**fig. 2**







European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number  
EP 99 83 0193

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	DE 29 35 691 A (WRIGLEY GMBH) 19 March 1981 (1981-03-19) * the whole document *	1-4, 7-14	B65D85/60 B65D25/54 A23G3/00
X	EP 0 455 421 A (UNILEVER PLC ; UNILEVER NV (NL)) 6 November 1991 (1991-11-06) * the whole document *	1-4	
X	PATENT ABSTRACTS OF JAPAN vol. 015, no. 257 (M-1130), 28 June 1991 (1991-06-28) & JP 03 085276 A (MITSUBISHI ELECTRIC CORP), 10 April 1991 (1991-04-10) * abstract *	1	
X	PATENT ABSTRACTS OF JAPAN vol. 097, no. 001, 31 January 1997 (1997-01-31) & JP 08 230950 A (G F GIJUTSU KAIHATSU:KK), 10 September 1996 (1996-09-10) * abstract *	1	
A	PATENT ABSTRACTS OF JAPAN vol. 097, no. 009, 30 September 1997 (1997-09-30) & JP 09 124023 A (DAIICHI KOGYO KK), 13 May 1997 (1997-05-13) * abstract *	1	TECHNICAL FIELDS SEARCHED (Int.Cl.7)  A23G B65D
A	PATENT ABSTRACTS OF JAPAN vol. 096, no. 010, 31 October 1996 (1996-10-31) & JP 08 167263 A (KONICA CORP), 25 June 1996 (1996-06-25) * abstract *	1	
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>1 October 1999</b>	Examiner <b>Guyon, R</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

EPO FORM 1500 03/88 (P/0409)



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number  
EP 99 83 0193

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	EP 0 809 248 A (SONY CORP) 26 November 1997 (1997-11-26)		
A	FR 2 288 688 A (CIFOT) 21 May 1976 (1976-05-21)		
A	WO 92 07061 A (REULECKE FRITZ ;HACKEL THOMAS (DE)) 30 April 1992 (1992-04-30) * the whole document *		
A	EP 0 447 733 A (E. BERNAT) 25 September 1991 (1991-09-25) * the whole document *		
A	EP 0 712 579 A (FERRERO) 22 May 1996 (1996-05-22)		
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>1 October 1999</b>	Examiner <b>Guyon, R</b>
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

EPO FORM 1503 03.82 (P04C01)



**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 99 83 0193

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-10-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 2935691 A	19-03-1981	NONE	
EP 0455421 A	06-11-1991	US 5064082 A	12-11-1991
		AT 128012 T	15-10-1995
		AU 643989 B	02-12-1993
		AU 7534391 A	07-11-1991
		CA 2041057 C	30-05-1995
		DE 69113107 D	26-10-1995
		DE 69113107 T	01-02-1996
		ES 2078442 T	16-12-1995
		JP 1871326 C	06-09-1994
		JP 4227208 A	17-08-1992
		JP 5083241 B	25-11-1993
		NZ 237906 A	25-03-1994
JP 03085276 A	10-04-1991	NONE	
JP 08230950 A	10-09-1996	NONE	
JP 09124023 A	13-05-1997	NONE	
JP 08167263 A	25-06-1996	NONE	
EP 0809248 A	26-11-1997	JP 9309583 A	02-12-1997
		CN 1173713 A	18-02-1998
		US 5893453 A	13-04-1999
FR 2288688 A	21-05-1976	NONE	
WO 9207061 A	30-04-1992	DE 4133798 A	23-04-1992
		DE 9112699 U	16-01-1992
		EP 0553182 A	04-08-1993
EP 447733 A	25-09-1991	CN 1054883 A,B	02-10-1991
		JP 3280833 A	11-12-1991
EP 712579 A	22-05-1996	CA 2161595 A	19-05-1996
		US 5858428 A	12-01-1999

EPO FORM P0439

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

**THIS PAGE BLANK (USPTO)**